

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 22, 2008 has been entered. Claims 1 and 2 are currently pending.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plate fitted by a spigot must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The

Art Unit: 2878

objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawai et al. (JP 05-325880) in view of Kyushima (U.S. Patent 5,744,908).

5. Regarding claim 1, Sawai et al. disclose (see abstract and Figs.) a light detection tube on which a plate (5), on which a photoelectric face (6) is formed, as a photoreceiving face plate is attached to a light entering window of a vacuum vessel (1), wherein a peripheral part of the plate is airtightly thermally crimped (thermoccompression) to a window peripheral part made of metal or ceramics, surrounding the light entering window via a seal ring (4) made of aluminum. A side surface (surface facing down) of the plate is covered with the window peripheral part. Sawai et al. disclose the plate is made quartz, rather than sapphire as claimed. Kyushima teaches (see col. 3, lines 30-35) in a light tube, the plate being made of either quartz or sapphire. Thus, Kyushima recognizes that quartz and sapphire are interchangeable. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a sapphire plate in the apparatus of Sawai et al. in view of Kyushima to obtain UV sensitivity as known. Sawai et al. and Kyushima further do not disclose a single crystal sapphire. However, single crystal sapphire is notoriously well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a single crystal sapphire in the apparatus of Sawai et al. in view of Kyushima to obtain a more resilient device as known. The language of "wherein the peripheral part of the sapphire plate is fitted

Art Unit: 2878

into the window peripheral part by a spigot” is a product by process step that is intermediate to the final product and is not structurally distinguishing.

6. Regarding claim 2, Sawai et al. in view of Kyushima disclose the claimed invention as set forth above. Sawai et al. and Kyushima do not disclose the thickness of the sapphire plate. However, such plates are typically in the mm range. Furthermore, choosing a particular thickness of the sapphire plate would require only routine skill in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to choose a thickness between 0.5 and 1 mm in the apparatus of Sawai et al. in view of Kyushima to obtain a desired sensitivity in detection.

Response to Arguments

7. Applicant's arguments filed September 22, 2008 have been fully considered but they are not persuasive.

8. Applicant asserts that the prior art does not disclose “the peripheral part of the sapphire plate is fitted into the window peripheral part by a spigot.” However, such an intermediate process step is not structurally limiting in a device claim. The spigot is not part of the final product.

9. Applicant also asserts that the prior art does not disclose “a side surface of the sapphire plate is covered with a window peripheral part.” Examiner disagrees as Applicant provides no explanation. It is unclear how a plate that overlaps the window peripheral part does not result in a side surface (surface facing down) of the plate covered by that part.

10. Thus, as set forth above this rejection is proper.

Conclusion

11. This is an RCE of applicant's earlier Application No. 10/560921. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the

Art Unit: 2878

grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

Art Unit: 2878

would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thanh X Luu/
Primary Examiner, Art Unit 2878